FINAL REPORT

of the

SBREFA Small Business Advocacy Review Panel

on EPA's Planned Proposed Rule for

FEDERAL IMPLEMENTATION PLANS FOR REGIONAL REDUCTIONS OF NITROGEN OXIDES

August 21, 1998

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Report of the Small Business Advocacy Review Panel on Proposed Federal Implementation Plans for Regional Reductions of Nitrogen Oxides

1. INTRODUCTION

This report is presented by the Small Business Advocacy Review Panel convened for the proposed Federal Implementation Plan (FIP) for Regional Reductions of Nitrogen Oxides (NOx) that the Environmental Protection Agency (EPA) is currently developing. On June 23, 1998, EPA's Small Business Advocacy Chairperson convened this Panel under section 609(b) of the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). Section 609(b) requires convening a review panel prior to publication of the initial regulatory flexibility analysis that an agency may be required to prepare under the RFA. In addition to its chairperson, the Panel consists of the Director of the Office of Air Quality Planning and Standards within the Office of Air and Radiation, the Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget, and the Chief Counsel for Advocacy of the Small Business Administration.

This report provides background information on the proposed rule being developed and the types of small entities that would be subject to the proposed rule, describes efforts to obtain the advice and recommendations of representatives of those small entities, summarizes the comments that have been received to date from those representatives, and presents the findings and recommendations of the Panel. The complete written comments of the small entity representatives are attached to this report.

Section 609(b) of the RFA directs the review panel to report on the comments of small entity representatives and make findings as to issues related to identified elements of an initial regulatory flexibility analysis (IRFA) under section 603 of the RFA. Those elements of an IRFA are:

- A description of, and where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- A description of projected reporting, record keeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirements and the type of professional skills necessary for preparation of the report or record;
- An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule; and
- A description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

Once completed, the Panel report is provided to the agency issuing the proposed rule and included in

the rulemaking record. In light of the Panel report, the agency is to make changes to the draft proposed rule, the IRFA for the proposed rule, or the decision on whether an IRFA is required, where appropriate.

It is important to note that the Panel's findings and discussion are based on the information available at the time this report was drafted. EPA is continuing to conduct analyses relevant to the proposed rule, and additional information may be developed or obtained during the remainder of the rule development process. The Panel makes its report at a preliminary stage of rule development and its report should be considered in that light. At the same time, the report provides the Panel and the Agency with an opportunity to identify and explore potential ways of shaping the proposed rule to minimize the burden of the rule on small entities while achieving the rule's statutory purposes. Any options the Panel identifies for reducing the rule's regulatory impact on small entities may require further analysis and/or data collection to ensure that the options are practicable, enforceable, environmentally sound and consistent with the statute authorizing the proposed rule.

2. BACKGROUND

The problem being addressed in this rulemaking is the windborne movement of ozone smog and one of its precursor chemicals -- nitrogen oxides, or "NOx" -- from NOx-producing sources. This movement -- called "transport" -- can cover very long distances; for example, sources in the midwestern U.S. have been found to contribute significantly to smog on the east coast. The NOx is produced primarily by combustion, and comes from such sources as automobiles, powerplants, and other industrial facilities such as industrial boilers, cement manufacturing plants, internal combustion engines, and gas turbines. As the NOx is transported downwind, it combines with other chemicals and contributes to the formation of ozone smog in cities throughout the eastern United States.

On November 7, 1997, in a Federal Register notice entitled "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone" (known as the "OTAG SIP Call"), EPA proposed to find that the transport of ozone from 22 eastern States and the District of Columbia contribute significantly to nonattainment of the ozone national ambient air quality standards (NAAQS), or interfere with maintenance of the NAAQS, in downwind States. The 23 jurisdictions are: Alabama, Connecticut, Delaware, District of Columbia, Georgia, Illinois, Indiana, Kentucky, Massachusetts, Maryland, Michigan, Missouri, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin.

In the November 7 notice, EPA also proposed the appropriate levels of NOx emissions reductions that each of the affected States will be required to achieve. This proposal allows States 12 months to develop, adopt and submit revisions to their State Implementation Plans (SIPs) in response to the final rulemaking. In a supplemental notice on May 11, 1998, EPA provided a more detailed

description of an emissions-trading program which EPA is offering to the States as an efficient and effective way to meet their obligations under the OTAG SIP Call rulemaking.

As a Federal "backstop" to this action, the Administrator is required to promulgate a Federal Implementation Plan within 2 years of (1) finding that a State has failed to make a required SIP submittal, or (2) finding that a submittal is not complete, or (3) disapproving a SIP submittal. Although the Clean Air Act allows EPA up to 2 years after the finding to promulgate a FIP, EPA intends to expedite the FIP promulgation to help assure that the downwind States realize the air quality benefits of regional NOx reductions as soon as practicable. Therefore, EPA intends to propose the FIPs at the same time as final action is taken on the November 7, 1997 OTAG SIP Call proposal. Furthermore, EPA intends to make a finding and promulgate a FIP immediately after the SIP submittal due date for each upwind State that fails to submit a SIP. The FIP rulemaking proposal will be entitled "Federal Implementation Plans to Reduce the Regional Transport of Ozone in the Eastern United States." It is this FIP rulemaking that was the subject of the SBREFA panel review documented in this report.

It is important to note that many of the sources affected by the FIPs and the OTAG SIP Call may also be affected by another related rulemaking also in development at this time. This rulemaking, called "Rulemaking Responding to Petitions Under Section 126 of the Clean Air Act," is a response to petitions received by EPA in August 1997 from eight northeastern States (Connecticut, Maine, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont) under section 126 of the Clean Air Act. Each petition requests that EPA make a finding that certain major stationary sources in upwind States contribute significantly to ozone nonattainment problems in the petitioning State. If EPA grants the requested findings, EPA must establish Federal emission control requirements for the affected sources in these jurisdictions. Sources would have to comply with the emissions limits within three years from the finding.

Since the aforementioned Section 126 rule is so closely related to the OTAG SIP Call and FIP rulemakings, the three are being closely coordinated. In this connection, it should also be noted that the Section 126 rulemaking proposal is being reviewed by a SBREFA panel which is being advised by the same set of Small Entity Representatives as the panel discussed in this report. The two panels are on the same schedule, and cover much the same ground. It is therefore expected that the recommendations to mitigate small-entity impact contained in this report will be very similar to, if not identical with, those in the Section 126 rulemaking panel report.

3. OVERVIEW OF PROPOSAL UNDER CONSIDERATION

The proposal under consideration in this Panel is a Federal Implementation Plan, mandated by the Clean Air Act in cases where a State fails to take the CAA-specified actions to achieve required emission reductions. In this case, the emissions in question consist of nitrogen oxides. The need for NOx reductions was determined through a two-year effort by the Ozone Transport Assessment Group

(OTAG), in which EPA worked in partnership with the 37 eastern-most States, industry representatives, and environmental groups to address the issue of ozone transport. The required reductions were determined by EPA, with the help of OTAG analysis, as those necessary to help States meet the National Ambient Air Quality Standards for ozone.

Under the Clean Air Act, the primary regulatory vehicle for achieving these NOx reductions is a "SIP call," a Federal action informing the States that their current plans for achieving ozone NAAQS attainment are inadequate in light of the aforementioned new information on ozone transport. The SIP call in this case, called the OTAG SIP Call, was proposed on November 7, 1997, and will be finalized in the fall of 1998. In the OTAG SIP Call, the required NOx reductions are expressed as overall emission-reduction "budgets" for each of the States named in the action; the OTAG SIP Call does not mandate which sources must reduce emissions, leaving that decision to the States. By contrast, in the FIP action under consideration by this panel, EPA would regulate sources directly, and would thus specify which sources must reduce emissions to achieve overall, State-level reduction targets identical to those specified by the OTAG SIP Call.

As noted in the OTAG SIP call proposal, EPA has found that highly cost-effective NOx reductions are available at large, fossil-fuel-burning sources, such as electric utility power plants greater than 25 megawatts in size, and industrial boilers with output greater than 250 million BTU per hour. Consequently, in the FIP, EPA expects to require these sources to provide a significant share of the necessary reductions. EPA also expects to allow these sources to achieve the reductions with maximum flexibility, including participation in a multistate emissions-trading approach. It is anticipated that most of the reductions will be achieved by such large sources, few of which are owned by small businesses or small communities. For the few large sources owned by small businesses and small communities, EPA intends to minimize impacts to the extent possible, utilizing input from the panel.

It is also possible that in some cases small sources not subject to the rule may be able to achieve cost-effective emission reductions. Such sources will be allowed to opt-in to the trading program if they can meet the monitoring requirements necessary to participate. These monitoring requirements are contained in 40 CFR Part 75.

This regulation will impose specific NOx emission limits on categories of sources. At proposal, the regulation will take the form of a combined action covering sources in all the States named in the OTAG SIP Call. The regulation will then be promulgated, if necessary, State-by-State to provide the mandated Federal backstop in cases where the State's response to the SIP call is inadequate. To the extent possible, it is anticipated that the FIP will allow large combustion sources to comply by means of an emissions-trading approach similar to the model trading program proposed in the OTAG SIP Call.

4. APPLICABLE SMALL ENTITY DEFINITIONS

To define small entities, EPA used the Small Business Administration (SBA) industry-specific criteria published in 13 CFR section 121. SBA size standards have been established for each type of economic activity under the Standard Industrial Classification (SIC) System. These criteria are usually expressed in terms of number of employees or dollar volume of sales.

To determine the affected small entities, EPA developed a list of SIC codes containing industries that might be subject to the proposed rule; these are essentially any industrial categories that emit NOx. This list of SIC codes is given in Section 5 below.

5. INDUSTRIES THAT MAY BE SUBJECT TO THE PROPOSED REGULATION

Due to their NOx-emitting properties, the following industries have the potential to be affected by the NOx FIP rulemaking:

SIC Codes in Division D: Manufacturing
2611 -- Pulp mills
2819 -- Industrial Inorganic Materials
2821 -- Plastics Materials, Synthetic Resins, and Nonvulcanizable Elastomers
2869 -- Industrial Organic Chemicals
3211 -- Flat Glass
3221 -- Glass Containers
3229 -- Pressed and Blown Glass and Glassware
3241 -- Cement, Hydraulic
3312 -- Steel Works, Blast Furnaces, and Rolling Mills
3511 -- Steam, Gas, and Hydraulic Turbines
3519 -- Stationary Internal Combustion Engines
3585 -- Air-Conditioning and Warm-Air Heating Equipment and Commercial and Industrial Refrigeration Equipment

SIC Codes in Division E: Transportation, Communications, Electric, Gas, and Sanitary Services
SIC Major Group 49: Electric, Gas, and Sanitary Services, including:
4922 -- Natural Gas Transmission
4931 -- Electric and other Gas Services
4961 -- Steam and Air Conditioning Supply

As described below, a number of these industries are under consideration for exemptions from rule applicability due to a number of factors, including amount of emissions, number of facilities, and availability of cost-effective control technology.

6. SUMMARY OF SMALL ENTITY OUTREACH

In developing this proposal, EPA has sought and obtained input from small businesses, small governmental jurisdictions, and small organizations. EPA and SBA agreed on a set of representatives of these three categories of small entities. The list of these representatives is given in Section 7 below.

Outreach Conducted Prior to Convening this Panel

Initial outreach was conducted by means of a meeting with the small-entity representatives in Washington, D.C. on April 14, 1998. The purpose of this meeting was to familiarize the small-entity representatives with the substance of the rulemaking and the kinds of sources being considered for regulation, and to solicit comment on these topics. A summary of that meeting is attached. Subsequent to the meeting, the representatives submitted followup comments in writing, copies of which are attached.

Outreach Conducted During the Panel Process

The primary outreach by the panel was accomplished by a meeting with the small-entity representatives in Washington, D.C. on August 4, 1998. The purpose of this meeting was to present the results of EPA's analysis on small-entity impacts, and to solicit comment on this analysis and on suggestions for impact mitigation. A summary of that meeting is attached. Subsequent to the meeting, the representatives submitted followup comments in writing, copies of which are attached.

A summary of the comments received at the August 4 meeting and the written comments submitted following that meeting is presented in Section 8 below.

7. SMALL ENTITY REPRESENTATIVES

EPA, in consultation with the Small Business Administration, invited the following 36 small entity representatives (SERs) to participate in its outreach efforts on this proposal. Those representatives who attended the August 4 meeting or who submitted written comments after that meeting are marked with an asterisk (*).

William Greco
American Foundrymen's Society

Jim McLarney
American Hospital Association

Randy Meyer
American Municipal Power-Ohio*

Tom Carter
American Portland Cement Alliance*

Bill Wemhoff
American Public Power Association*

Allen Schaeffer
American Trucking Association

David Woodbury
American Wire Producers Association

Robert Ruddock
Associated Industries of Massachusetts*

Robert Bessette
Council of Industrial Boiler Owners*

Warren Stickle
Chemical Producers and Distributors Association

Nelson Cooney
Brick Institute of America

Carter Keithley
Hearth Products Association

Raj G. Rao
Indiana Municipal Power Agency

Matthew Hare
Michigan Manufacturers Association

James J. Houston
Industrial Heating Equipment Association

Jay J. Vroom
National Agricultural Chemicals Assoc.

Theresa Larson
National Association of Manufacturers

Jennifer Tolbert
National Association of Public Hospitals & Health Systems

John Satagaj
National Business Legislative Council

Tom Sullivan
National Federation of Independent Business*

Susan Fry
National Food Processors

Eric Males
National Lime Association*

Richard Margosian
National Particleboard Association

John Paul Galles
National Small Business United

Tracey Steiner
National Rural Electric Cooperative Association

Bruce Craig
Natural Gas Supply Association*

Megan Medley
Nonferrous Founders Society

Thomas E. Cole
Rubber Manufacturers Association

Randy Meyer
Ohio Municipal Electric Association*

Maureen Healey
Society of the Plastics Industry

Julie Scofield
Smaller Business Association of New England

Clifton Shannon
SMC Business Councils*

Victor N.Tucci, M.D.
Three Rivers Health & Safety, Inc. and Small Business United*

Karen Price

West Virginia Manufacturers' Association

Michael H. Levin
West Virginia Chamber of Commerce*

Tobia G. Mercuro
Capitol Cement Corporation*

8. SUMMARY OF INPUT FROM SMALL ENTITY REPRESENTATIVES

SER comments were received by the Panel both verbally at the August 4 meeting and in writing subsequent to that meeting. Attachment A includes a summary of the August 4 meeting, and Attachment B contains all the written comments received. The following is a summary of all the comments on the Federal Implementation Plans, both verbal and written.

Comments concerning impacts on the cement industry were received from one company and two associations. The industry commented that the control technology assumed for their industry could not achieve the 30% reduction assumed by EPA, but would likely achieve only 15% at best. This claim was supported by a comment from one association. Other industry comments included the following: EPA's assumed technology may not work with all fuels, and that in some cases it could cause increases in other pollutants; 4 out of 5 kilns at small plants are not large, and the total contribution of these small plants is minuscule -- about 0.017% of the emissions in the region, contrasted with a much larger figure for lime kilns, which are being exempted; these small cement plants also have short stacks and therefore, in the opinion of the commenters, do not contribute significantly to transport; most of the large cement plants are very large, with a much greater ability to absorb costs and avoid them by importing from outside the region. The industry representative then commented that EPA should exempt cement kilns that are small businesses. He also commented that SBREFA was intended for these kinds of situations, and that EPA does have the authority to exempt small entities on the basis of de minimis emissions and administrative burdens. This viewpoint was strongly supported by the comments from one of the associations. Finally, the industry commented that EPA's actions here would greatly influence the States as they develop their SIPs, which makes it even more important to address small-entity impacts in this rule. This view was echoed by several of the other comments described below.

One of the associations presented further arguments supporting the view that SBREFA authorizes EPA to exempt small entities on the basis of de minimis emissions impact, in a way analogous to other categorical exemptions being considered, such as source-size cutoffs and de minimis exemptions. This commenter also mentioned that the stack heights of the small-entity-owned cement plants subject to the rule were less than 200 feet, which he said was below the thermal mixing layer,

and therefore that any emissions would not contribute to transported pollution. This commenter urged EPA to exempt the remainder of the non-EGU small entities on the basis of these kinds of factors. Failing this, the commenter suggested exempting any small entities with emissions under some limit higher than the ones already being considered.

Comments regarding impacts on industrial boilers were received from one association. Many of these comments appeared to be aimed at distinguishing industrial boilers (of any size) from utility boilers, and are thus tangential to the assessment of impacts on boilers owned and operated by small entities. The thrust of these comments was that EPA's industrial-boiler assumptions regarding cost and the benefits of trading are based on utility experience and analyses, and therefore do not translate very well to industrial boilers, which are normally much smaller. Presumably these factors would apply even more strongly to smaller industrial boilers. The association commented that the costs of continuous emission monitors (CEMs) for industrial boilers would be so high they would prevent the boilers from participating in trading. This association also commented that any industrial boilers were old, implying very high control costs, and that they are not base-loaded as utility units are, implying a high cost-per-ton of control. Commenters suggested that, for the foregoing reasons, EPA should put a cap on the cost per ton of control required.

Comments on electric generating units (EGUs) were received from two public power companies and one public power association. The company and one association concurred with EPA's choice of 25 MW as the lower-size applicability cutoff. One association commented that EPA's cost-lowering assumptions for trading were too optimistic, and that EPA should make it easier for small units to opt-in to the trading program. One association commented that small utilities should get trading credit for significant NOx reductions already accomplished. The association and one company claimed that several affected units in their area show high costs (above 3% of revenue) and that these were probably peaking units, which inherently run only for brief times and are thus very inefficient to control.

Finally, one association echoed the concern, voiced by the cement industry (cited above), that the States may still target small entities, and that EPA should issue guidance addressing this problem.

9. PANEL FINDINGS AND DISCUSSION

9.1 Major Topics of Panel Discussion

The primary topic of panel discussion was the applicability of the FIP to the various categories of NOx-emitting sources, the costs the rule would impose, and the possibility of further reducing rule applicability. Secondary topics included emissions monitoring and other potentially duplicative Federal rules. These discussions are summarized below. Panel findings are presented in section 9.5 below.

9.2 The Types and Number of Small Entities to Which the Proposed Rule Would Apply

The FIP rulemaking is potentially applicable to all stationary-source NOx-emitting entities in the 23-jurisdiction area covered by the FIP. EPA estimates that the total number of such entities is approximately 5300, of which about 1200 are small entities. Based primarily on considerations of overall cost-effectiveness and administrative efficiency, EPA is considering reducing this applicability based on several factors including input from this panel. Specifically, EPA is now considering exempting a number of source categories from being subject to this regulation based on factors such as low relative emissions and lack of an identified NOx control technology. Additional categories of sources are being considered for exemption as being cost-ineffective, with EPA considering an average cost-effectiveness of $2000 per ton of NOx removed as the upper average cost limit.

If EPA follows through with this reduced-applicability approach, the FIP will apply only to the following types of sources: electric generating units (EGUs), industrial boilers and combustion turbines, and internal combustion engines and cement manufacturers. The stringency levels of control EPA currently intends to propose for these types of sources is as follows: for EGUs, an emission rate of .15 pounds of NOx per million BTU; for industrial boilers and combustion turbines, an emission reduction of 60%; and for internal combustion engines and cement manufacturers, a cost-effectiveness cutoff level of $4000 per ton of NOx removed. At these stringency levels, the estimated number of small entities that would be affected is as follows:

Electric Generating Units -- 114 small entities
Industrial Boilers and/or Combustion Turbines -- 35 small entities
Internal Combustion Engines and Cement Manufacturers -- 6 small entities

EPA has further estimated that, of these affected small entities, the following would experience costs equal or greater to 1% of their revenues:

Electric Generating Units -- 32 small entities
Industrial Boilers and Combustion Turbines -- 8 small entities
Internal Combustion Engines and Cement Manufacturers -- 3 small entities

Of these, EPA estimates that about 18 small entities with electric generating units and 4 small entities with industrial boilers or turbines would see costs greater than 3% of revenues, and that no IC engines or cement manufacturers would see costs above 3% of revenues.

Focusing the rule on these categories would constitute **a reduction of over 85% in the number of small entities affected by the rule: out of 1200 potentially-affected small entities, over 1000 would be exempted, with only 155 small entities remaining**. The panel received written comments from three small-entity representatives strongly endorsing these exemptions. In section 9.5 below, the panel likewise recommends that they be adopted in the rule proposal.

9.3 Projected Reporting, Record Keeping, and Other Compliance Requirements of the

Proposed Rule

In this area, panel discussion was centered on the requirement for continuous emissions monitors (CEMs) for sources other than electric generators. The panel received both written and oral comments to the effect that CEMs would be prohibitively costly for many industrial boilers, representing a significant part of the cost of the rule. Comments from the cement industry asserted that a CEM requirement for trading sources would prevent them from taking advantage of trading. EPA believes that it is necessary for all sources in the trading program to be subject to accurate and consistent monitoring requirements designed to demonstrate compliance with a mass emission limitation, and therefore intends to require all large units to monitor NOx mass emissions using CEMS (including units opting-in to the trading program). However, EPA does believe that it is appropriate to provide lower cost monitoring options for units with low NOx mass emissions, and therefore intends to allow non-CEMs alternatives for units that have emissions of less than 50 tons per year of NOx. This cutoff will provide relief for boilers large enough to be covered by the rule, but that run for a smaller number of hours each year, including any such boilers owned by small entities.

EPA is currently considering whether to require CEMs for both trading and non-trading sources in this rule. OMB and SBA share the commenters' concern for the potentially high cost of CEM requirements. For this reason, both OMB and SBA recommend that EPA exercise great caution in requiring CEMs on those sources not participating in the trading program. OMB and SBA recommend that EPA solicit comment on alternative monitoring options for non-trading sources, such as parametric monitoring or monitoring as currently required by the New Source Performance Standards (NSPS) program. SBA was dismayed to find out about potential monitoring requirements for the cement manufacturing industry on day 59 of the Panel process. Affected SERs were never advised on this possible requirement, and therefore could not provide any comment. SBA believes that if EPA desires to pursue this requirement as part of the proposed rule, the agency should consider convening a new Panel process to deal with the new information.

9.4 Other Relevant Federal rules Which May Duplicate, Overlap, or Conflict with the Proposed Rule

Discussion in this area centered on the role of State regulation via SIPs versus the role of the Federal government under the FIP and 126 rules. The American Public Power Association and Capitol Cement Corporation both submitted written comments expressing worry that regardless of the decisions made about the FIP, many States would nonetheless target small businesses when they prepare their SIPs. The same argument would apply to the 126 rule. Both commenters recommended that EPA write guidance to address this problem. As outlined in Section 9.5, the panel is recommending that EPA produce such guidance. Capitol Cement Corporation also expressed another kind of duplicative problem -- namely, that with their very limited administrative resources, they found it very difficult to assess the likely effect of the various requirements that might apply to them, such as the FIP, State SIPs, the Prevention of Significant Deterioration (PSD) program, and the toxics-control

programs such as requirements to reduce air toxic emissions and to manage cement kiln dust. The panel judges that the relation between the FIP and SIPs is the aspect of most concern here, and addresses it with a recommendation in Section 9.5 to provide guidance to the States to ensure better harmonization between the FIP and SIPs.

9.5 Regulatory Alternatives

The Panel agreed with the general approach EPA is now considering to define the scope of the rule. **The Panel recommends that the categorical exemptions outlined in Section 9.2 be included in the proposal, and further recommends that the applicability of EPA's proposed rule be limited to the categories shown in that section.**

The Panel notes that EPA's cost estimates in Section 9.2 show that even with this narrowed scope, the rule is still projected to impact over 40 small entities at a level greater than or equal to 1% of revenues, and over 20 entities at 3% or greater. Moreover, commenters have questioned the assumptions behind EPA's estimates, as outlined in Section 8 above. Further refinement of these assumptions and analyses could raise or lower the impact estimates. Given this uncertainty, the panel considered it appropriate to explore options for further reducing the impact of the rule.

Several commenters have suggested that EPA exempt all small entities from this rulemaking. Although EPA does not feel that a blanket, across-the-board exemption could be supported, in the spirit of SBREFA EPA has indicated it is receptive to proposals for further exemptions, up to and including exempting all small entities if that could be shown to be appropriate. Therefore, the panel **recommends that EPA solicit comment on additional types of small-entity exemptions and the rational bases on which such exemptions could be made, such as disproportionate ability to bear costs and administrative burden.**

The panel **recommends that EPA encourage non-trading sources to opt-in to the emissions trading program. Allowing these sources to opt-in to the trading program provides an incentive to develop alternative cost-effective control options that will allow sources to improve overall emissions reduction cost savings**.

Some commenters have suggested that control costs for industrial boilers are likely to be higher than EPA has estimated, and that a ceiling should be set on the cost per ton that these boilers should be required to pay. The panel considered this, but also recognized that EPA expects to factor CEM cost into the overall control cost considered when setting the level of stringency of the rule. EPA believes the effect of this will be to require somewhat less emission reduction than if CEM cost had not been considered for this source category. In addition, owners of those industrial boilers with high emissions reduction costs may choose to purchase emissions credits in the trading program rather than control emissions to the required level.

In furtherance of SBREFA's goal of reducing small-entity impacts, in addition to the aforementioned general recommendations, the panel has proposed a number of specific ideas for exempting or reducing burden on particular categories of small entities. Many of these ideas were generated from comments made by small entity advisors to this panel. The first category the panel explored was cement kilns, where commenters had raised questions regarding EPA's analyses of control efficiency and cost. The first option explored was to propose exempting cement kilns as a source category if it could be shown that EPA's assumed 30% reduction of NOx emissions is not feasible, and that the achievable reductions were such that it would not be cost-effective to require controls on these sources. The panel **recommends that EPA solicit comment on rational bases on which small-entity-owned cement kilns could be exempted if further analysis shows this to be appropriate. Examples of the kinds of factors that might be considered rational bases for exemption are disproportionate ability to bear costs and administrative burdens, and contributing only de minimis amounts of emissions.**

The second option considered by the panel was to retain applicability to cement kilns, but to grant relief if, after installing available controls, they proved to be unable to achieve the mandated 30% reduction in NOx emissions. This concept was conceived in this case due to commenters' claims that cement kilns are highly idiosyncratic, and that the available cost-effective technologies (such as mid-kiln firing) may produce greatly varying results from unit to unit. The model concept considered was that of an Alternative Emission Limit (AEL) similar to the one used in the Acid Rain NOx Reduction program (59 FR 13538, 3/22/94), whereby a source can apply for and receive a less stringent reduction requirement if it can be shown that this lesser reduction is the most that can be achieved at that particular unit. To implement this concept, the panel **recommends that EPA solicit comment on whether small-entity-owned cement kilns unable to achieve the mandated reduction should be given the opportunity to apply for an AEL to be set at a level demonstrated to be achievable at the unit in question. EPA should also solicit comment on the appropriateness and workability of this option, and should solicit information to support it.**

The next area considered by the panel was electric generating units (EGUs). EPA's analysis shows that slightly more than 30 EGUs may experience costs above 1% of revenues, and that 18 of these might exceed 3%. From comments made by small utilities, the panel suspects that many of these high-cost-to-revenue situations may involve peaking units, which run only a small percentage of the time and thus may be inefficient to control. To address this problem, the panel **recommends that EPA solicit comment on whether to allow electric generating units to obtain a federally enforceable NOx emission tonnage limit (e.g., 25 tons during the ozone season) and thereby obtain an exemption from FIP applicability. EPA should also solicit comment on the necessity for and appropriateness of such an option.**

Individual panel members conceived of other potential ways to mitigate impact on small entities, such as raising the size cutoff for small entities and/or lessening the required percentage reduction in NOx emissions required from small entities. (SBA recommends requiring only a 40% reduction instead

of 60% for small-entity-owned industrial boilers, and notes that the impacts of 40% reductions submitted to the Panel by the program office included large firms as well. SBA encourages the agency to conduct analyses to determine the impact of 40% reduction being applied solely to small firms and 60% solely to large firms, and the resulting effect on control levels for sources regulated in the FIP proposal.) The panel members are split on this issue: some oppose considering such options, but others **recommend that (1) EPA solicit comment on whether requirements should be reduced on small-entity-owned industrial boilers by some combination of raising the size cutoff and/or lessening the required reduction; (2) that EPA solicit comment on which, if any, of these options is preferable, the necessity and appropriateness of any such option, and the appropriate level (e.g., 40% reduction instead of 60%); and (3) that EPA solicit information to support any comments submitted.**

Finally, the panel notes that several commenters have expressed concern that regardless of the sensitivity to small-entity concerns EPA shows in the FIP and/or 126 rulemakings, the States may nevertheless see fit to target small entities in their SIPs. To help address this problem, the panel **recommends that, subsequent to the FIP and 126 proposals, EPA issue guidance that conveys to the States the kinds of options and alternatives EPA has considered in addressing small-entity concerns, explains the rationale behind these kinds of options, and recommends that the States consider adopting similar alternatives in their SIPs.**